



# UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE  
United States Patent and Trademark Office  
Address: COMMISSIONER FOR PATENTS  
P.O. Box 1450  
Alexandria, Virginia 22313-1450  
[www.uspto.gov](http://www.uspto.gov)

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/902,287	07/10/2001	Michael Conor Minogue		8694
20999	7590	04/06/2004		
FROMMERM LAWRENCE & HAUG 745 FIFTH AVENUE- 10TH FL. NEW YORK, NY 10151			EXAMINER	DROESCH, KRISTEN L
			ART UNIT	PAPER NUMBER
			3762	
			DATE MAILED: 04/06/2004	

Please find below and/or attached an Office communication concerning this application or proceeding.

<b>Office Action Summary</b>	<b>Application No.</b>	<b>Applicant(s)</b>
	09/902,287	MINOGUE ET AL.
	<b>Examiner</b>	<b>Art Unit</b>
	Kristen L Drosch	3762

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

#### Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

#### Status

- 1) Responsive to communication(s) filed on 09 March 2004.
- 2a) This action is **FINAL**.                    2b) This action is non-final.
- 3) Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

#### Disposition of Claims

- 4) Claim(s) 1 and 3-71 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) Claim(s) \_\_\_\_\_ is/are allowed.
- 6) Claim(s) 1 and 3-71 is/are rejected.
- 7) Claim(s) \_\_\_\_\_ is/are objected to.
- 8) Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

#### Application Papers

- 9) The specification is objected to by the Examiner.
- 10) The drawing(s) filed on 10 July 2001 is/are: a) accepted or b) objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

#### Priority under 35 U.S.C. § 119

- 12) Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) All    b) Some \* c) None of:
  1. Certified copies of the priority documents have been received.
  2. Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  3. Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

#### Attachment(s)

- 1) Notice of References Cited (PTO-892)
- 2) Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)  
Paper No(s)/Mail Date \_\_\_\_\_
- 4) Interview Summary (PTO-413)  
Paper No(s)/Mail Date. \_\_\_\_\_
- 5) Notice of Informal Patent Application (PTO-152)
- 6) Other: \_\_\_\_\_

## **DETAILED ACTION**

### ***Priority***

1. Acknowledgment is made of applicant's claim for foreign priority based on an application filed in Ireland on Jan 11, 1999. It is noted, however, that applicant has not filed a certified copy of the S990016 application as required by 35 U.S.C. 119(b).

### ***Claim Objections***

2. Claim 1 is objected to because of the following informalities: the word "line" is missing from the claim in line 11 following (left mid-axillary). Appropriate correction is required.

### ***Claim Rejections - 35 USC § 102***

3. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

4. Claims 1, 3-12, 14-23, 27-28, 32-36, 38-39, 52-60, and 71 are rejected under 35 U.S.C. 102(e) as being anticipated by Hurtado (6,341,237).

Regarding claim 1, Hurtado shows a device including attachment means (120) for extending around the torso of a subject; a main locating means (track 36) for locating a central electrode (144) substantially about the umbilicus of the subject; and two secondary locating means (tracks 36) provided on the attachment means disposed on opposite sides of the main locating means for locating two corresponding side electrodes (146, 148, 150, 152) of the at least three electrodes, a first of the two side electrodes (146, 148) spaced apart from the central

Art Unit: 3762

electrode (144) in a general direction of towards the left mid-axillary line or the subject and a second of the two side electrodes (150, 152) spaced apart from the central electrode (144) in a general direction of towards the right mid-axillary line or the subject (Fig 9; Col. 10, line 40-Col. 11, line 17; Figs. 3 6; Col 9, lines 51-58).

Regarding claims 3-5, Hurtado shows the secondary locating means (tracks 36) are disposed on the attachment means for locating the respective side electrodes toward the midpoint of the corresponding mid-axillary line between the rib cage and the corresponding iliac crest, adjacent the corresponding mid-axillary line, and adjacent the midpoint of the corresponding mid-axillary line between the rib cage and the corresponding iliac crest (Fig 9; Col. 10, line 40-Col. 11, line 17; Figs. 3 6; Col 9, lines 51-58).

With respect to claims 6-7, Hurtado shows the main locating means (track 36) is disposed on the attachment means for locating the central electrode on the umbilicus and extending completely around the umbilicus (Figs. 7-9, Col. 4, line 65-Col. 5, line 21; Col. 10, lines 53-60).

Regarding claims 8-10, Hurtado shows the a reference means (tracks 36) for locating the attachment means on the torso relative an anatomic reference, circumferentially around the torso and vertically along the torso (Figs. 3, 6-9).

With respect to claim 11, Hurtado shows the main locating means (track 36 for electrode 144) acts as a reference means for locating the attachment means relative to the umbilicus (Figs. 3, 6-9; Col. 4, line 65-Col. 5, line 21; Col. 10, lines 53-60).

Regarding claim 12, Hurtado shows at least two sets (tracks 36 of electrodes 150 and 152, and tracks 36 for electrodes 146, and 148) of at least two secondary locating means disposed on the opposite sides of the main locating means (Figs. 3, 6, 9).

With respect to claims 14-15, Hurtado further shows the attachment means comprises a resilient material being of greater stretchability than that of other materials of the attachment means (Col. 10, line 45-47; Col. 9, lines 3-20).

Regarding claims 16-18, Hurtado further shows the main electrically conductive contact means (36) is provided on the attachment means corresponding to the main locating means and located within and adjacent to the main locating means (36) (Col. 9, lines 54-55).

Regarding claims 19-20, Hurtado further shows each secondary contact means (tracks 36) is located adjacent the secondary locating means (Figs. 3, 6, 9).

With respect to claims 21-22, Hurtado further shows each main and secondary locating means (tracks 36) is provided as a visually perceptive locating means and formed as a corresponding locating mark on the attachment means (Figs. 3, 6).

Regarding claim 23, Hurtado shows each locating means (36) is adapted for locating a patch type electrode (Figs. 2, 3, 6).

With respect to claim 27, Hurtado shows each central electrode (140, 142, 144) is sized to extend substantially across the rectus abdominus muscle (Fig. 9; Col. 10, line 40-Col. 11, line 17).

Regarding claim 28, Hurtado further shows the area of contact of each side electrode (146, 148, 150, 152) does not exceed the area of contact of the central electrode (144) (Fig. 9).

With respect to claim 32, Hurtado further shows a receiving means provided in the attachment means for receiving a signal generating means (121) (Col. 11, lines 19-20).

Regarding claims 33-36, Hurtado further shows main and secondary electrical connecting means (dashed lines) extending between the receiving means and the signal generating means (121) and the main contact means (Figs. 1-3, 6, 9).

With respect to claim 38-39, Hurtado further shows the attachment means comprises a belt (124) and a securing means (130) (Fig. 9).

Regarding claim 52, Hurtado shows a method comprising providing at least three electrodes (140, 142, 144, 146, 148, 150, 152), one of the at least three electrodes being a central electrode (140, 142, 144) located substantially about the umbilicus of the subject, and the other two electrodes are side electrodes spaced apart on the subject from the central electrode, a first of the side electrodes (146, 148) spaced apart from the central electrode (144) in a general direction of towards the left mid-axillary line or the subject and a second of the two side electrodes (150, 152) spaced apart from the central electrode (144) in a general direction of towards the right mid-axillary line of the torso intermediate the rib cage and corresponding left and right iliac crests and passing at least one pulsed signal subcutaneously through the subject between the at least three electrodes (Fig. 9; Col. 4, line 48-Col.5, line 21; Col. 10, line 40-Col. 11, line 33).

With respect to claims 53-55, Hurtado shows each side electrode (146, 148, 150, 152) is located towards and adjacent the midpoint of the corresponding mid axillary line of the torso intermediate the rib cage and the corresponding iliac crest (Fig 9; Col. 10, line 40-Col. 11, line 17).

With respect to claims 56-57, Hurtado shows the central electrode (140, 142, 144) is located on the umbilicus and extends completely around the umbilicus (Figs. 7-9, Col. 4, line 65-Col. 5, line 21; Col. 10, lines 53-60).

Art Unit: 3762

Regarding claim 58, Hurtado shows the central electrode (140, 142, 144) is located on the umbilicus but with a greater area of the central electrode (142, 144) located below the umbilicus than above the umbilicus (144, 140) (Fig. 9; Col. 10, line 40-Col. 11, line 33).

With respect to claim 59, Hurtado further shows the step of applying the at least one pulse signal to the subject.

Regarding claim 60, Hurtado further shows the at least one pulsed signal is applied simultaneously to each of the side electrodes (Col. 11, lines 27-33).

Regarding claim 71, Hurtado further shows the magnitude of each pulse of each pulsed signal is adjustable (Col. 3, lines 63-67).

***Claim Rejections - 35 USC § 103***

5. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

6. Claim 13 is rejected under 35 U.S.C. 103(a) as being unpatentable over Hurtado (6,341,237) as applied to claim 12. Hurtado discloses the claimed invention except for each set of secondary locating means comprising three secondary locating means. It would have been an obvious design choice to one with ordinary skill in the art at the time the invention was made to modify each set of secondary locating means with two secondary locating means as taught by Hurtado with each set of secondary locating means having three secondary locating means, since applicant has not disclosed that this third locating means provides any criticality and /or unexpected results and it appears that the invention would perform equally well with any number

of secondary locating means in the set of secondary locating means such as the two secondary locating means as taught by Hurtado for locating electrodes on the belt.

7. Claim 29 is rejected under 35 U.S.C. 103(a) as being unpatentable over Hurtado (6,341,237). Hurtado discloses the claimed invention except for the specific size of the each side electrode. It would have been an obvious matter of design choice to form the side electrode having a width of 50 mm to 150 mm since such a modification would have involved a mere change in the size of a component. A change in size is generally recognized as being within the level of ordinary skill in the art. *In re Rose*, 105 UPSQ 237 (CCPA 1955).

8. Claim 37 is rejected under 35 U.S.C. 103(a) as being unpatentable over Hurtado (6,341,237) as applied to claim 32 above, and further in view of Russek (4,381,012). Although Hurtado fails to show the receiving means is a releasable receiving means for releasably receiving the signal generating means, attention is directed to Russek, which shows a similar device and teaches that the attachment means comprises receiving means made of VELCRO for releasably receiving the signal generating means. Russek teaches that the releasable receiving means allows for the signal generating means to be located in a convenient location on the attachment means (Col. 6, lines 43-53). Therefore it would have been obvious to one with ordinary skill in the art at the time the invention was made to modify the device of Hurtado with receiving means made of VELCRO for releasably receiving the signal generating means in order to allow for the signal generating means to be located in a convenient location on the attachment means.

9. Claims 40-45, 48-49 are rejected under 35 U.S.C. 103(a) as being unpatentable over Hurtado (6,341,237) as applied to claim 1 above, and further in view of Russek (4,381,012).

Art Unit: 3762

Although Hurtado fails to show a main fastening means provided corresponding to the main locating means and secondary fastening for fastening the respective side electrodes to the attachment means adjacent the secondary located means, attention is directed to Russek which shows a similar device with fastening means comprising stud fasteners (Figs. 9-11, 18; Col. 5, lines 26-54). Russek teaches that utilizing stud fastener fastening means is advantageous since it allows wires to be run external to the belt rather than within the belt resulting in a minimal number of wires that can be damaged during laundering (Col. 5, lines 47-54). Therefore it would have been obvious to one with ordinary skill in the art at the time the invention was made to modify the device of Hurtado with a main fastening means and secondary fastening means comprising stud fasteners since Russek teaches stud fastener fastening means are advantageous since it allows wires to be run external to the belt rather than within the belt resulting in a minimal number of wires that can be damaged during laundering.

Regarding claim 44, Russek further shows each stud fastener comprises a female (61-66) and male part (66') (Figs. 9-10, 18)

With respect to claim 45, Russek further shows each stud fastener is electrically conductive (Col. 5, lines 26-54).

Regarding claims 48-49, Russek shows each stud fastener comprises a first part (57) for attaching to a corresponding electrode and a second part (66) for attaching to the attachment means wherein the first and second parts engage each other with electrically conductive engagement.

10. Claims 46-47, and 50-51 are rejected under 35 U.S.C. 103(a) as being unpatentable over Hurtado (6,341,237) and Russek (4,381,012) as applied to claims 44 and 48 above. Hurtado and

Art Unit: 3762

Russek disclose the claimed invention except for showing the exposed surface of the portions of each stud fastener attached to the attachment means is of electrically insulating material provided by an electrically insulated coating. It would have been an obvious design choice to one with ordinary skill in the art at the time the invention was made to modify the exposed portions of the stud fasteners as taught by Hurtado and Russek with insulating coatings in order to protect a user who may come into contact with the exposed portions of the stud fasteners from electrical shock.

*Response to Arguments*

11. Applicant's arguments, see Paper No. 11, page 16, filed 3/9/04, with respect to claims 1, 3-5, 8-11, 14-15, 21-26, 29-31, 38-39, 52-55, 59 and 61-71 have been fully considered and are persuasive. The rejection of claims 1, 3-5, 8-11, 14-15, 21-26, 29-31, 38-39, 52-55, 59 and 61-71 utilizing the Linder reference has been withdrawn.
12. Applicant's arguments filed 3/9/04 with respect to the Hurtado reference have been fully considered but they are not persuasive. The priority document has not been received.

*Conclusion*

13. **THIS ACTION IS MADE FINAL.** Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event,

Art Unit: 3762

however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Kristen L Drolesch whose telephone number is 703-605-1185. The examiner can normally be reached on M-F, 10:00 am - 6:00 pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Angie Sykes can be reached on 703-308-5181. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).



kld



ANGELA D. SYKES  
SUPERVISORY PATENT EXAMINER  
TECHNOLOGY CENTER 3700